

### Phase II-III

t-Test: Paired Two Sample for Means - All Data

	<i>m2</i>	<i>m1</i>
Mean	24.34291	22.99503
Variance	192.3196	362.0209
Observations	1227	1227
Pearson Correlation	0.279774	
Hypothesized Mean Difference	0	
df	1226	
t Stat	2.341205	
P( $T \leq t$ ) one-tail	0.009691	
t Critical one-tail	1.646097	
P( $T \leq t$ ) two-tail	0.019381	
t Critical two-tail	1.961898	

### Phase II-III

t-Test: Paired Two Sample for Means  
Excluding Upper and Lower 1<sup>st</sup> Percentiles

	<i>m2</i>	<i>m1</i>
Mean	23.49666	21.87468
Variance	119.832	181.405
Observations	1202	1202
Pearson Correlation	0.55712	
Hypothesized Mean Difference	0	
df	1201	
t Stat	4.805169	
P( $T \leq t$ ) one-tail	8.71E-07	
t Critical one-tail	1.646124	
P( $T \leq t$ ) two-tail	1.74E-06	
t Critical two-tail	1.961939	

### Phase II-III

t-Test: Paired Two Sample for Means - No Dredging

	<i>m2</i>	<i>m1</i>
Mean	24.06945	21.82411
Variance	242.9158	210.3845
Observations	758	758
Pearson Correlation	0.310507	
Hypothesized Mean Difference	0	
df	757	
t Stat	3.494671	
P( $T \leq t$ ) one-tail	0.000251	
t Critical one-tail	1.64687	
P( $T \leq t$ ) two-tail	0.000502	
t Critical two-tail	1.963103	

### Phase II-III

t-Test: Paired Two Sample for Means - No Dredging  
Excluding Upper and Lower 1<sup>st</sup> Percentiles

	<i>m2</i>	<i>m1</i>
Mean	22.70304	21.629
Variance	122.9282	173.4948
Observations	742	742
Pearson Correlation	0.578146	
Hypothesized Mean Difference	0	
df	741	
t Stat	2.5904	
P( $T \leq t$ ) one-tail	0.004887	
t Critical one-tail	1.646913	
P( $T \leq t$ ) two-tail	0.009775	
t Critical two-tail	1.963172	

### Phase II-III

t-Test: Paired Two Sample for Means - Dredging

	<i>m2</i>	<i>m1</i>
Mean	25.10893	25.5338
Variance	114.2809	668.7336
Observations	409	409
Pearson Correlation	0.292991	
Hypothesized Mean Difference	0	
df	408	
t Stat	-0.3448	
P( $T \leq t$ ) one-tail	0.365212	
t Critical one-tail	1.648596	
P( $T \leq t$ ) two-tail	0.730424	
t Critical two-tail	1.965795	

### Phase II-III

t-Test: Paired Two Sample for Means - Dredging  
Excluding Upper and Lower 1<sup>st</sup> Percentiles

	<i>m2</i>	<i>m1</i>
Mean	25.10694	22.53938
Variance	116.5088	203.7368
Observations	400	400
Pearson Correlation	0.527393	
Hypothesized Mean Difference	0	
df	399	
t Stat	4.088692	
P( $T \leq t$ ) one-tail	2.62E-05	
t Critical one-tail	1.648682	
P( $T \leq t$ ) two-tail	5.25E-05	
t Critical two-tail	1.965927	

Regression Analysis: M2 (Phase II & III)

Omitting the 15 values > 60 ntu collected on 9/26 and 9/27

SUMMARY OUTPUT

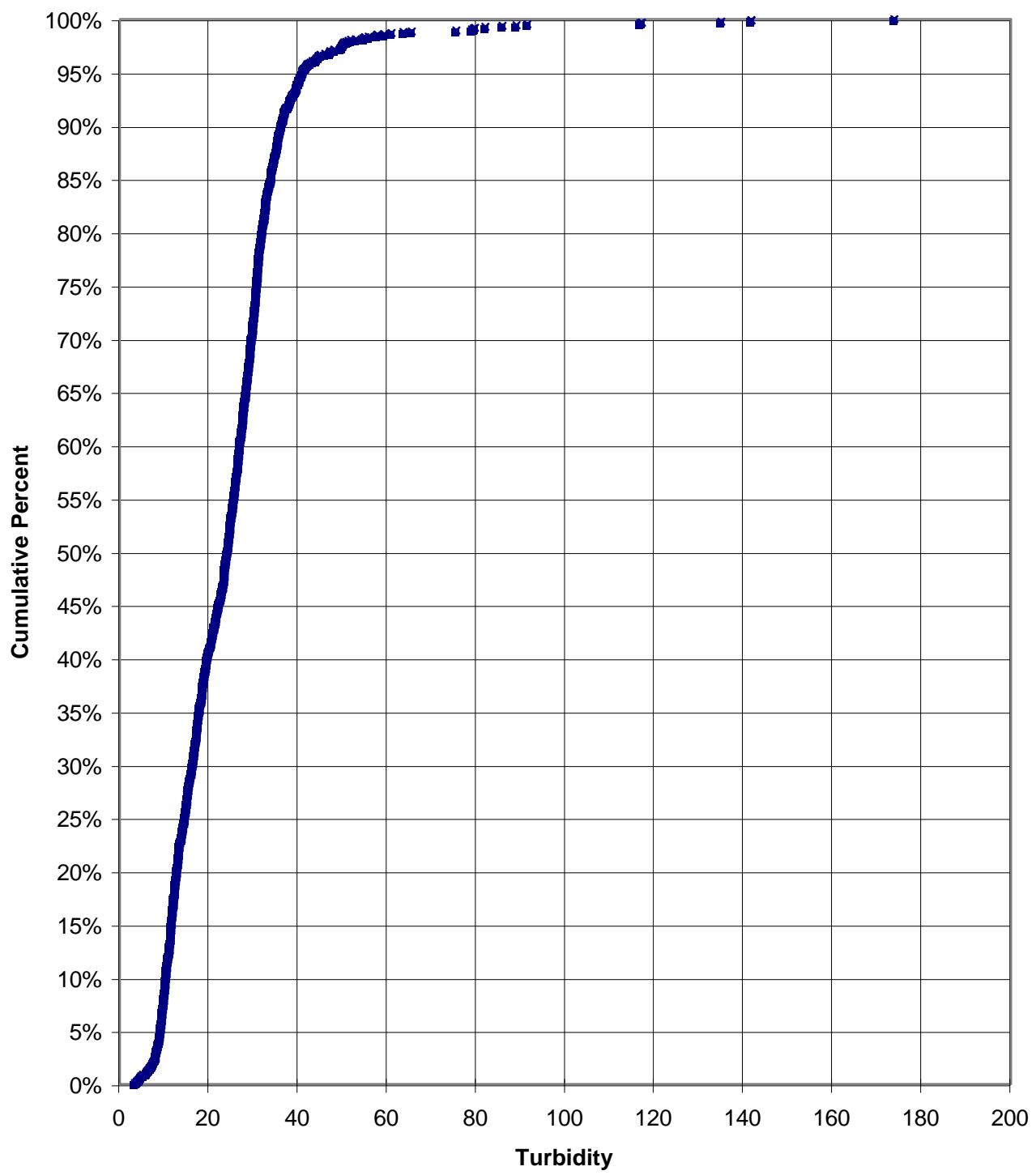
<i>Regression Statistics</i>	
Multiple R	0.449026143
R Square	0.201624477
Adjusted R Square	0.200299372
Standard Error	9.580738446
Observations	1208

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	27933.22339	13966.61	152.1574	1.20184E-59
Residual	1205	110607.6118	91.79055		
Total	1207	138540.8351			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	9.293772543	0.855986121	10.85739	2.89E-26	7.614383682	10.9731614	7.614383682	10.9731614
Dredging	2.222804648	0.576875926	3.853176	0.000123	1.091011759	3.35459754	1.091011759	3.354597536
Flow	0.008133499	0.000481484	16.89256	1.28E-57	0.007188858	0.00907814	0.007188858	0.009078139

**Cumulative Percent Chart**  
**Turbidity M2**  
**Phase II and III**



### Phase II-III

t-Test: Paired Two Sample for Means - All Data

	<i>m3</i>	<i>m1</i>
Mean	30.289	22.94474
Variance	4106.022	362.0962
Observations	1227	1227
Pearson Correlation	0.124946	
Hypothesized Mean Difference	0	
df	1226	
t Stat	3.986991	
P( $T \leq t$ ) one-tail	3.54E-05	
t Critical one-tail	1.646097	
P( $T \leq t$ ) two-tail	7.09E-05	
t Critical two-tail	1.961898	

### Phase II-III

t-Test: Paired Two Sample for Means  
Excluding Upper and Lower 1<sup>st</sup> Percentiles

	<i>m3</i>	<i>m1</i>
Mean	25.09994	21.59742
Variance	323.4594	179.4536
Observations	1202	1202
Pearson Correlation	0.431706	
Hypothesized Mean Difference	0	
df	1201	
t Stat	7.071322	
P( $T \leq t$ ) one-tail	1.3E-12	
t Critical one-tail	1.646124	
P( $T \leq t$ ) two-tail	2.6E-12	
t Critical two-tail	1.961939	

### Phase II-III

t-Test: Paired Two Sample for Means - No Dredging

	<i>m3</i>	<i>m1</i>
Mean	31.26628	21.77487
Variance	6021.868	210.5231
Observations	759	759
Pearson Correlation	0.116474	
Hypothesized Mean Difference	0	
df	758	
t Stat	3.384237	
P( $T \leq t$ ) one-tail	0.000375	
t Critical one-tail	1.646868	
P( $T \leq t$ ) two-tail	0.00075	
t Critical two-tail	1.963099	

### Phase II-III

t-Test: Paired Two Sample for Means - No Dredging  
Excluding Upper and Lower 1<sup>st</sup> Percentiles

	<i>m3</i>	<i>m1</i>
Mean	24.10736	21.11583
Variance	289.3563	159.8441
Observations	744	744
Pearson Correlation	0.388768	
Hypothesized Mean Difference	0	
df	743	
t Stat	4.859265	
P( $T \leq t$ ) one-tail	7.19E-07	
t Critical one-tail	1.646908	
P( $T \leq t$ ) two-tail	1.44E-06	
t Critical two-tail	1.963163	

### Phase II-III

t-Test: Paired Two Sample for Means - Dredging

	<i>m3</i>	<i>m1</i>
Mean	27.8062	25.48327
Variance	515.8841	669.8834
Observations	408	408
Pearson Correlation	0.316144	
Hypothesized Mean Difference	0	
df	407	
t Stat	1.644503	
P( $T \leq t$ ) one-tail	0.050422	
t Critical one-tail	1.648605	
P( $T \leq t$ ) two-tail	0.100845	
t Critical two-tail	1.965809	

### Phase II-III

t-Test: Paired Two Sample for Means - Dredging  
Excluding Upper and Lower 1<sup>st</sup> Percentiles

	<i>m3</i>	<i>m1</i>
Mean	27.07571	22.69894
Variance	362.6146	221.7282
Observations	400	400
Pearson Correlation	0.455968	
Hypothesized Mean Difference	0	
df	399	
t Stat	4.849907	
P( $T \leq t$ ) one-tail	8.87E-07	
t Critical one-tail	1.648682	
P( $T \leq t$ ) two-tail	1.77E-06	
t Critical two-tail	1.965927	

Regression Analysis: M3 (Phase II and III)  
 Excluding the 8 values > 400 from 8/22, 9/12 and 9/13  
 SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.191682175
R Square	0.036742056
Adjusted R Square	0.035129909
Standard Error	20.83172625
Observations	1198

#### ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	2	19780.59197	9890.296	22.79076	1.93287E-10
Residual	1195	518583.1779	433.9608		
Total	1197	538363.7699			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	14.08374112	1.863841665	7.556297	8.22E-14	10.4269716	17.74051063	10.4269716	17.7405106
Dredging	3.146221117	1.259920286	2.497159	0.012653	0.674316888	5.618125346	0.67431689	5.61812535
Flow	0.006486696	0.001047617	6.191859	8.16E-10	0.004431321	0.008542071	0.00443132	0.00854207

**Cumulative Percent Chart**  
**Turbidity M3**  
**Phase II and III**

